GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

March 4, 2019

Nicole Caveny, Utah Federal Lands Coordinator
Office of Surface Mining Reclamation and Enforcement
Western Region
1999 Broadway, Suite 3320
Denver, Colorado 80202

Subject: Decision Document, LBA Block 1, Coal Hollow Mine, Alton Coal Development, LLC, C/025/0005, Task #5855

Dear Ms. Caveny:

The Division has completed our Decision Document for the LBA Block 1 area at the Coal Hollow Mine. Two copies of the entire package are enclosed as per your request. The package consists of the Decision Document, the Revised Permit with conditions, our Technical Analysis, a Location Map and the 510c clearance. The Division believes that the application is complete and accurate and is ready for federal mine approval.

This completes our portion of the process and we are forwarding this for your use in completing the Secretarial approval portion of the mine plan approval. Your prompt review and processing is requested.

Please call me at (801) 538-5350 if there is any other information that you require.

Sincerely,

Steve Christensen
Permit Supervisor

SKC/sqs
O:\025005.COL\WG5855 LBA\MPMD.DOC

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

State Decision Document

Alton Coal Development, LLC
LBA Block 1
Coal Hollow Mine
C/025/0005

March 4, 2019

UTAH DIVISION OF OIL, GAS AND MINING
STATE DECISION DOCUMENT AND
TECHNICAL ANALYSIS

Alton Coal Development, LLC
LBA Block 1
Coal Hollow Mine
C/025/0005

CONTENTS

* Administrative Overview
* Location Map
* Permitting Chronology
* Permit with conditions, dated March 4, 2019
* Technical Analysis, dated March 4, 2019
* AVS Recommendation, dated February 28, 2019

ADMINISTRATIVE OVERVIEW

Alton Coal Development, LLC
LBA Block 1
Coal Hollow Mine
C/025/0005
Kane County, Utah

March 4, 2019

PROPOSAL:

Alton Coal Development, LLC proposes to expand the Coal Hollow Mine in Kane County to include the first LBA federal coal block known as Federal Block 1 or LBA Block 1.

BACKGROUND:

The Alton coal field is located in T39S, R6W and T39S, R5W SLB&M, Kane County, Utah. The town of Kanab, which is the Kane County Seat, is located about 30 miles south of the Alton coal field. Alton Coal Development, LLC (ACD) is the company responsible for the development of a portion of the Alton coal field which is known as the Coal Hollow Mining Project. The center of the Coal Hollow Project (CHP) is located approximately 3 miles south of the town of Alton, Utah.

In 2004, ACD negotiated surface and coal leases for the private or fee areas of the Alton coal field. In 2004 ACD submitted a Lease by Application (LBA) to the Department of the Interior, Bureau of Land Management State Office, Salt Lake City, Utah for federal coal acreage contiguous to the secured private lease area. Starting in 2006, ACD submitted an application for a mine permit along with a Mining and Reclamation Plan (MRP) to the Utah Division of Oil, Gas and Mining (UDOGM). It took until November 8, 2010 to complete the permitting process when the Division issued a permit for the Coal Hollow Mine.

The Coal Hollow Project started as a surface mining operation that intended to produce approximately 2,000,000 tons of coal annually using pit mining. Midway through the project, ACD initiated Highwall mining which was used in a portion of the mine. Recently the Company has instigated underground mining, which is still being developed. Production at the mine has been much slower than anticipated.

A portion of the North Private Lease (area 10 was approved for mining on February 2, 2016. This allowed the mine to continue operations on areas not affecting wetlands. Area 1 was later expanded on December 21, 2016 to allow additional mining through pit #9 in the North Lease.

Alton Coal Development, LLC submitted an application to expand the Coal Hollow Mine in Kane County to include the first LBA federal coal block known as Federal Block 1 or LBA Block 1. The Division approved the amendment on March 4, 2019. Approval of the federal coal block will change the Coal Hollow Mine from a Non-Federal Mine to a Federal Mine and will require a federal mine plan modification.

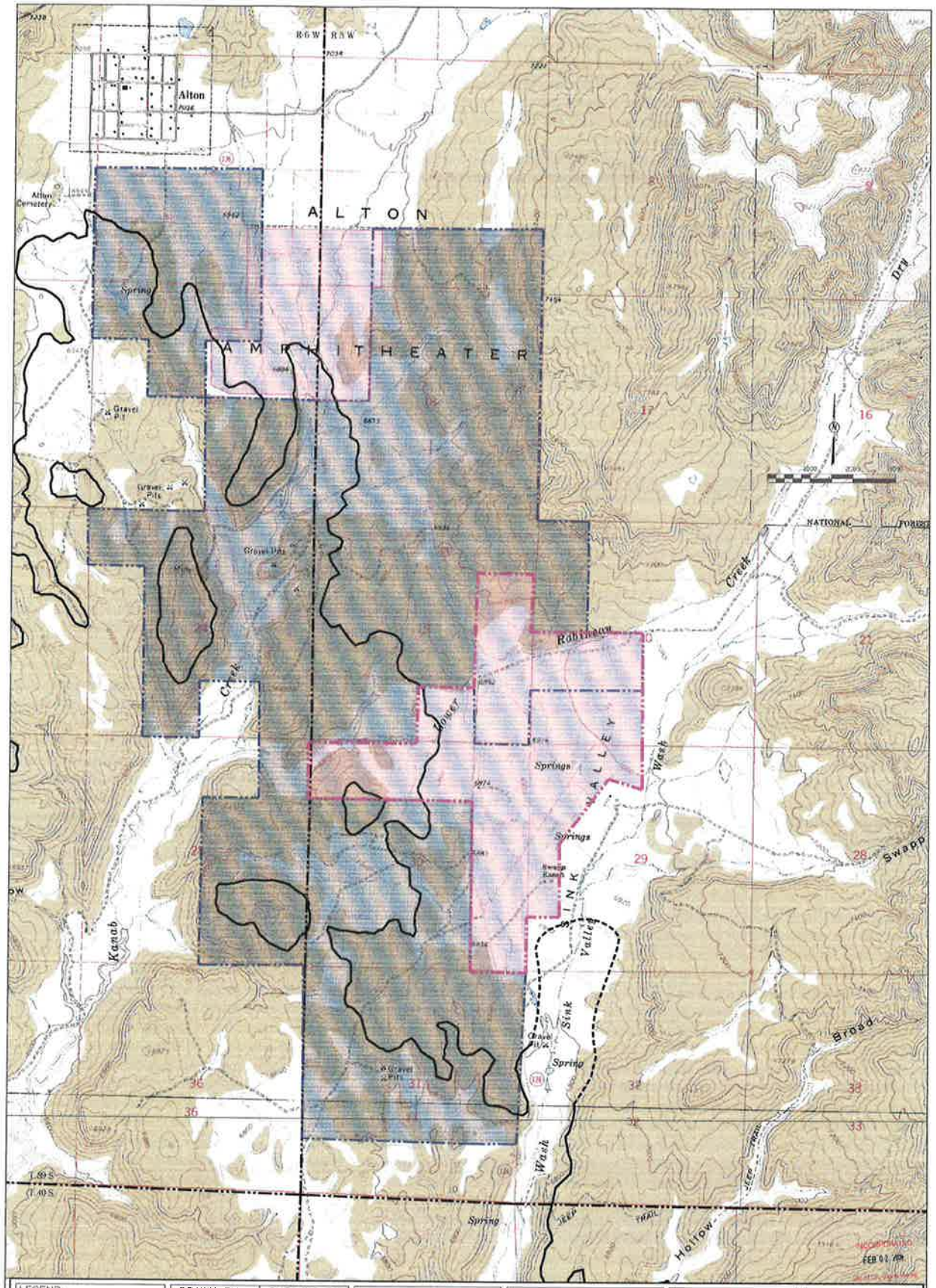
ANALYSIS:

The Division of Oil Gas and Mining has conducted an Administrative and Technical Analysis of the proposed mine Permit Application Package and has produced a written TA. It has been determined that the Applicant has the legal right to enter and conduct mining operations in the proposed permit area through acquired lease. The application meets the requirements of the Utah Coal Regulatory Program.

RECOMMENDATION:

This recommendation is based on the complete permit application package (PAP), the Technical Analysis (TA) conducted by the Division and the administrative record. Alton Coal Development, LLC has demonstrated that mining within the LBA 1 boundary can be done in conformance with the Surface Mining Control and Reclamation Act, and the corresponding Utah Act and performance standards. The 510(c) report on the Applicant Violator System was verified for this mine on February 28, 2019 and there are no violations.

It is recommended that approval be given for mining in the expanded boundary of the LBA federal coal block at the Coal Hollow Mine with the conditions summarized as Attachment A to the Permit.



LEGEND:	DRAWN BY:	CHECKED BY:	REVISIONS		PERMIT AREA WITH LBA		Coal Hollow Project
PROPOSED LBA BOUNDARY	N. BUTKOVICH	DWG	DATE:	BY:			463 North 100 West, Suite 1 Cedar City, Utah 84721 Phone (435)867-5331 Fax (435)867-1192
PERMIT AREA	DRAWING:	DATE:	8/25/08	CRM	COAL HOLLOW PROJECT ALTON, UTAH		
COAL LINE BOUNDARY	1 – 2	8/16/04	10/18/13	KN			
COUNTY ROAD		SCALE:	8/7/14	KN			
		1" = 1000'					
	JOB NUMBER:	SHEET			DRAWING: 1-2		
	1400						

PERMITTING CHRONOLOGY

Alton Coal Development, LLC
LBA Block 1
Coal Hollow Mine
C/025/0005
Kane County, Utah

March 4, 2019

October 15, 2018	Alton Coal Development, LLC, submits the permit application package for LBA Block 1 at the Coal Hollow Mine.
November 20, 2018	The Division finds deficiency in the application notifies ACD to resubmit the application.
December 17, 2018	ACD submits a revised application.
January 24, 2019	The Division finds deficiency in the application notifies ACD to resubmit the application.
January 30, 2019	ACD submits a revised application.
February 28, 2019	AVS check completed with issue recommendation.
March 4, 2019	TA completed.
March 4, 2019	Revised Permit approved with conditions.

FEDERAL **PERMIT** **June 21, 2017**
Revised March 4, 2019

C/025/0005

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801
(801) 538-5340

This permit, C/025/0005, is issued for the State of Utah by the Utah Division of Oil, Gas and Mining (DOGM) to:

ALTON COAL DEVELOPMENT, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
(435)867-5331

for the Coal Hollow Mine. Alton Coal Development, LLC is the lessee of the entire surface estate encompassing 1017.153 acres. A performance bond is filed with the DOGM in the amount of $13,000,000, payable to the state of Utah, Division of Oil, Gas and Mining and the United States Department of Interior, Office of Surface Mining Reclamation and Enforcement is filed with the Division. DOGM must receive a copy of this permit signed and dated by the permittee.

Sec. 1 **STATUTES AND REGULATIONS** - This permit is issued pursuant to the Utah Coal Mining and Reclamation Act of 1979, Utah Code Annotated (UCA) 40-10-1 et seq, hereafter referred to as the Act.

Sec. 2 **PERMIT AREA** - The permittee is authorized to conduct coal mining and reclamation activities on the following described lands within the permit area at the Coal Hollow mine, situated in the state of Utah, Kane County, and located:

TOWNSHIP 39 SOUTH-RANGE 05 WEST, SLB&M
Section 30: All of Section Lot #1 (NW¼ NW¼); NE¼ NW¼; N ½ NE¼; ALSO: BEGINNING 3.50 chains West of the East Quarter corner of Said Section 30, and running South 34° 34′ West 22.64 chains of the 1/16 section line; thence West 2.64 chains to the Southwest corner of NE¼ SE¼ of Said Section 30; thence North 40.00 chains; thence East 20.00 chains; thence South 14.69 chains; thence southwesterly to the point of beginning…containing 217.64 acres, more or less.

TOWNSHIP 39 SOUTH-RANGE 05 WEST, SLB&M
Section 29: BEGINNING at the Northwest corner of Said Section 29, and running thence

South 34.69 chains; thence North 33° 22′ East 35.50 chains; thence North 40° West 0.58 chains; thence North 37° 30′ East 12.30 chains; thence West 22.23 chains to the point of beginning…containing 36.04 acres, more or less.

TOWNSHIP 39 SOUTH-RANGE 05 WEST, SLB&M

Section 19: SW¼ SE¼, E½ SE¼, SE¼ NE¼…containing 160.0 acres, more or less.

TOWNSHIP 39 SOUTH-RANGE 05 WEST, SLB&M

Section 20: SW¼…containing 160.00 acres, more or less.

TOWNSHIP 39 SOUTH-RANGE 05 WEST, SLB&M

Section 30: BEGINNING at a point 5.3 I chains North of the E¼ corner of Said Section 30, and running thence South 45.31 chains; thence West 20.00 chains; thence North 20.00 chains; thence East 2.64 chains; thence North 34° 34′ East 22.64 chains to the 1/16 section line; thence North 33° 22′ East to the point of beginning…containing 61.96 acres, more or less.

TOWNSHIP 39 SOUTH-RANGE 05 WEST, SLB&M

Section 29: BEGINNING at the Northeast Corner of the Northwest Quarter of Said Section 29, and running thence South 14.97 chains; thence West 73 degrees North, 12.41 chains; thence South 36 degrees 45 minutes West to the Quarter Section Line of Section 29; thence South 36 degrees 45 minutes West 15.61 chains; thence South 5.20 chains to the center section line of Section 29; thence South 20.0 chains; thence West 10.96 chains to the west section line of Section 29; thence North 20.0 chains to the Quarter Section Corner of Section 29; thence North 25.31 chains; thence North 33 degrees 22 minutes East 35.50 chains; thence in a Northwesterly direction 2 rods; thence North 37 degrees 30 minutes East 12.30 chains to the North Section Line of Section 29; thence East 17.77 chains to the point of beginning….containing 85.88 acres, more or less.

NORTH PRIVATE LEASE AREA

The following described lands located in Kane County, Utah within Sec. 12 &13, T39S, R6W and within Sec. 7 &18, T39S, R5W:

Beginning S 58 degrees 16' 29" W a distance of 1,920.87 ' from Section Corner 7-18-12-13, T39S, R5R6W; thence N 89°29'27\ W a distance of 823.81'; thence S 00°00'38\ E a distance of 1313.93'; thence S 65°46'32\ E a distance of 479.40'; thence S 89°44'30\ E a distance of 1861.86'; thence S54°58'33\ E a distance of 226.53'; thence S 89°45'07\ E a distance of 1235.50'; thence N 00°41'09\ E a distance of 1322.97'; thence N 00°41'09\ E a distance of 1322.97'; thence S 89°30'20\ E a distance of 241.42'; thence N 00°51'49\ E a distance of 1323.52'; thence N 89°22'59\ W a distance of 249.30'; thence N 89°56'02\ W a distance of 2923.34'; thence S 00°24'59\ W a distance of 2326.09'; which is the point of beginning, having an area of 12,877,780.47 square feet, or **295.633 acres**

This legal description is for the permit area (1017 acres) of the Coal Hollow Mine and included in the operation and reclamation plan on file at the Division. The permittee is authorized to conduct coal mining and reclamation operations on the foregoing described property subject to the leases and Conditional Use Permit issued by Kane County, including all conditions and all other applicable conditions, laws and regulations.

Sec. 3 **COMPLIANCE** - The permittee will comply with the terms and conditions of the permit, all applicable performance standards and requirements of the State Program.

Sec. 4 **PERMIT TERM -** This permit expires on November 8, 2020.

Sec. 5 **ASSIGNMENT OF PERMIT RIGHTS** - The permit rights may not be transferred, assigned or sold without the approval of the Director, DOGM. Transfer, assignment or sale of permit rights must be done in accordance with applicable regulations, including but not limited to 30 CFR 740.13(e) and R645-303.

Sec. 6 **RIGHT OF ENTRY** - The permittee shall allow the authorized representative of the DOGM, including but not limited to inspectors, and representatives of OSMRE, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay to:

A. have the rights of entry provided for in 30 CFR 840.12, R645-400-110, 30 CFR 842.13 and R645-400-220; and,

B. be accompanied by private persons for the purpose of conducting an inspection in accordance with R645-400-100 and 30 CFR 842, when the inspection is in response to an alleged violation reported by the private person.

Sec. 7 **SCOPE OF OPERATIONS** - The permittee shall conduct coal mining and reclamation operations only on those lands specifically designated as within the permit area on the maps submitted in the mining and reclamation plan and permit application and approved for the term of the permit and which are subject to the performance bond.

Sec. 8 **ENVIRONMENTAL IMPACTS** - The permittee shall minimize any adverse impact to the environment or public health and safety through but not limited to:

A. accelerated monitoring to determine the nature and extent of noncompliance and the results of the noncompliance;

B. immediate implementation of measures necessary to comply; and

C. warning, as soon as possible after learning of such noncompliance, any

person whose health and safety is in imminent danger due to the noncompliance.

Sec. 9 **DISPOSAL OF POLLUTANTS** - The permittee shall dispose of solids, sludge, filter backwash or pollutants in the course of treatment or control of waters or emissions to the air in the manner required by the approved Utah State Program which prevents violation of any applicable state or federal law.

Sec. 10 **CONDUCT OF OPERATIONS** - The permittee shall conduct its operations:

A. in accordance with the terms of the permit to prevent significant, imminent environmental harm to the health and safety of the public; and

B. utilizing methods specified as conditions of the permit by DOGM in approving alternative methods of compliance with the performance standards of the Act, the approved Utah State Program.

Sec. 11 **EXISTING STRUCTURES** - As applicable, the permittee will comply with R645-301 and R645-302 for compliance, modification, or abandonment of existing structures.

Sec. 12 **RECLAMATION FEE PAYMENT** - The operator shall pay all reclamation fees required by 30 CFR part 870 for coal produced under the permit, for sale, transfer or use.

Sec. 13 **AUTHORIZED AGENT** - The permittee shall provide the names, addresses and telephone numbers of persons responsible for operations under the permit to whom notices and orders are to be delivered.

Sec. 14 **COMPLIANCE WITH OTHER LAWS** - The permittee shall comply with the provisions of the Water Pollution Control Act (33 USC 1151 et seq,) and the Clean Air Act (42 USC 7401 et seq), UCA 26-11-1 et seq, and UCA 26-13-1 et seq.

Sec. 15 **PERMIT RENEWAL** - Upon expiration, this permit may be renewed for areas within the boundaries of the existing permit in accordance with the Act, the approved Utah State Program.

Sec. 16 **CULTURAL RESOURCES** - If during the course of mining operations, previously unidentified cultural resources are discovered, the permittee shall ensure that the site(s) is not disturbed and shall notify DOGM. DOGM, after coordination with OSMRE, shall inform the permittee of necessary actions required. The permittee shall implement the mitigation measures required by DOGM within the time frame specified by DOGM.

Sec. 17 **APPEALS** - The permittee shall have the right to appeal as provided for under R645-300.

Sec. 18 **SPECIAL CONDITIONS** - There are special conditions associated with this permitting action as described in Attachment A.

The above conditions (Secs. 1-18) are also imposed upon the permittee's agents and employees. The failure or refusal of any of these persons to comply with these conditions shall be deemed a failure of the permittee to comply with the terms of this permit and the lease. The permittee shall require his agents, contractors and subcontractors involved in activities concerning this permit to include these conditions in the contracts between and among them. These conditions may be revised or amended, in writing, by the mutual consent of DOGM and the permittee at any time to adjust to changed conditions or to correct an oversight. DOGM may amend these conditions at any time without the consent of the permittee in order to make them consistent with any new federal or state statutes and any new regulations.

THE STATE OF UTAH

By: John R. Baza

Date: 3/4/2019

I certify that I have read, understand and accept the requirements of this permit and any special conditions attached.

_____

Authorized Representative of the Permittee

Date: _____

ATTACHMENT A
SPECIAL CONDITIONS

1. Alton Coal Development, LLC (ACD) will submit water quality data for the Coal Hollow Mine in an electronic format through the Electronic Data Input web site, http://linux3.ogm.utah.gov/cgi-bin/appx-ogm.cgi.

2. In the event that ACD encounters large volumes of groundwater (a sustained flow of more than 1 cfs) in any pit, they will be required to notify the Division, and assess and submit plans to curtail inflows to the pit and reestablish groundwater movement.

3. The Applicant will be required to monitor for selenium where water leaves the minesite, during operational and reclamation phases.

4. The Applicant will be required to evaluate discharges from the mine to determine any impacts to the designated AVF on Kanab Creek. An annual finding should be placed in the Annual Report during operation and reclamation of any adverse impacts to the channel, diminution of water quality and impacts to wildlife.

5. Prior to conducting coal mining and reclamation operations within areas 2 & 3 of the North Private Lease, Alton Coal Development will obtain the necessary 404 permit from the U. S. Army Corp. of Engineers.

6. As part of the incremental bonding scenario, prior to mining beyond pit #12 of the North Private Lease, Alton Coal Development will post additional performance bond or will reduce their reclamation liability by acquiring additional bond release.

7. Alton Coal Development, LLC must receive federal mine approval from the Secretary of the Interior and concurrence from the Office of Surface Mining. Mining is not authorized in the LBA Block 1 Area until the Mine Plan has been signed by the Assistant Secretary of the Interior.

GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Technical Analysis and Findings

Utah Coal Regulatory Program

March 4, 2019

PID:	**C0250005**
TaskID:	**5855**
Mine Name:	**COAL HOLLOW**
Title:	**LBA BLOCK 1**

Summary

The application provides mining plans for a block of federal coal that is located within the SW1/4 NW1/4 of Section 20 (Dwg 1-3). The South Lease disturbed area boundary will increase from 372.5 acres (Chap 1, p. 18) to 414.5 acres. The federal block is designated 2019 mining on Plate 5-2. Overburden will be removed as shown on Dwg 5-16. Under the proposed mining scenario, the underground mining facilities in Pit 10 would be eliminated and Pits F7 and F8 will become the access for UG mining.

pburton

General Contents

Right of Entry

Analysis:

The application meets the State of Utah R645 requirements for Right of Entry, because Chapter 1, p. 15 references federal coal lease UTU-81895, signed February 14, 2019 that provides underground right of entry. The lease is included in Appendix 1-2.

The surface Right of Entry document is the Pugh Lease item 8.04 found in Appendix 1-2 (Confidential 10152009.doc).

pburton

Permit Term

Analysis:

The application meets the State of Utah R645 requirements for Permit Term, because the termination date for the South Lease is contingent upon completion of UG Mining authorized by federal lease UTU -81895. The lease was issued February 14, 2019 for a period of twenty years which could extend the life of mine until 2039. The North Lease completion date is expected to be 2023. Dwg 5-38 and Dwg 5-76A provide anticipated completion dates for mining areas within the South and North Leases, respectively.

pburton

Permit Application Format and Contents

Analysis:

The amendment meets the State of Utah R645 requirements for Permit Application Format and Contents.

Previously this amendment did not satisfy R645-301-121.100 and R645-301-121.200 because information was missing

or features incorrectly labeled within Drawings 5-9, 5-17, and 5-22. Permittee has corrected the minor typographical and arithmetic errors present in these Drawings and now meet the requirements for Permit Application Format and Contents.

jeatchel

Environmental Resource Information

Historic and Archeological Resource Information

Analysis:

The amendment meets the State of Utah R645-301-411 requirements for historic and archeological information. There are three cultural sites located in or adjacent to the LBA Block 1 project area: 42KA2060, 42KA6104, and 42KA6105. These sites have all been recorded and mitigated for in anticipation of coal mining and reclamation activities. There are no other known sites that have been in the area. Deficiencies regarding the consultation process with the Bureau of Land Management were raised in a previous task (#5833) associated with this proposal. Following consultation with the Office of Surface Mining Reclamation and Enforcement (email correspondence from Feb. 25, 2019) it is determined that the permitting process may move forward using the July 14, 2008 SHPO concurrence as evidence to satisfy the requirements of R645-301-411. The 2008 clearance applies to this amendment due to the fact that it involves land previously approved for coal mining and reclamation activities and has, in fact, already been partially disturbed. Future amendments, however, that are for activities outside the currently established permit area, would be subject to BLM consultation and approval prior to the initiation of mining.

tmiller

Climatological Resource Information

Analysis:

The amendment meets the State of Utah R645 requirements for Climatological Resources.

The climatological resources of the area have been adequately classified and quantified for the mining area. These data have been continually updated through subsequent amendments to the MRP through the years keeping climate data up-to-date.

kstorrar

Geologic Resource Information

Analysis:

Geologic Resource information was provided in the original Coal Hollow permit application and was incorporated into the Mining and Reclamation Plan on October 15, 2009. Information for the South Lease area was adequately characterized and has not changed as a result of this amendment. LBA Block 1 is entirely located within the existing permit boundary of the South Lease area.

dhaddock

Hydro Baseline Information

Analysis:

The amendment meets the State of Utah R645 requirements for Baseline Information.

The amendment proposes to mine federal coal within the current permit area of the Coal Hollow mine. Surface water and groundwater resources within and adjacent to the permit area have been seasonally monitored for baseline and operational parameters since the issuance of the permit.

kstorrar

Probable Hydrologic Consequences Determination

Analysis:

The amendment meets the State of Utah R645 requirements for Probable Hydrologic Consequences.

The amendment proposes to mine the federal coal sitting north of Pit 10 in the south lease. Drawings 5-9 and 5-10 show the coal extraction area and the location and orientation of the pits to mine the coal. The PHC is updated to state the pits will be located entirely to the west of the north-south trending Tropic shale ridge running through the permit area and open-pit mining will not disturb the aquifer resting to the east of the ridge. If future amendments on open pit extents propose to mine through this ridge the PHC shall be updated to address any impacts to the hydrologic balance that will occur. Including potentially reduced flows at springs resting along the southern end of the ridge near the Dame's property.

kstorrar

Hydro GroundWater Monitoring Plan

Analysis:

The amendment meets the State of Utah R645 requirements for Groundwater Monitoring.

The amendment proposes to mine federal coal within the current permit area of the Coal Hollow mine. Groundwater resources within and adjacent to the permit area have been seasonally monitored for baseline and operational parameters since the issuance of the permit.

kstorrar

Hydro SurfaceWater Monitoring Plan

Analysis:

The amendment meets the State of Utah R645 requirements for Surface Water Monitoring.

The amendment proposes to mine federal coal within the current permit area of the Coal Hollow mine. Surface water resources within and adjacent to the permit area have been seasonally monitored for baseline and operational parameters since the issuance of the permit.

kstorrar

Maps Subsurface Water Resources

Analysis:

The amendment meets the State of Utah R645 requirements for Subsurface Water Resource Maps.

The amendment updates Drawings 7-15 and 7-15B within the MRP to show the cross-sectional and plan view extent of mining activities in the LBA Block 1. Open pit mining will resume adjacent to the Tropic Shale ridge in the south lease. It is well known a large alluvial aquifer rests to the east of the Tropic Shale ridge. The mining operations at the Coal Hollow mine have taken significant precautions in the past to not mine through the aquitard shale ridge barrier and leave the alluvial aquifer undisturbed.

The updated Drawing 7-15B shows the cross-sectional lateral extent of the open pit setbacks and the location of the highwall miner auger holes in relation to the Tropic Shale ridge and alluvial deposits to the east. The groundwater table in the alluvial deposits are shown cross-sections A-A' through F-F'. These cross-sections extend north to span the proposed open pits within the LBA Block 1. Drawing 7-15 shows a plan view profile of the pit locations, highwall auger hole extents and the boundary of the 'Excavated Area Disturbance' shown on Plate 5-17 in the amendment. The update includes the aerial orthoimage and the Sink Valley Fault line.

kstorrar

Maps Surface Water Resource

Analysis:

The amendment meets the State of Utah R645 requirements for Surface Water Resources Maps.

The amendment proposes to mine federal coal within the current permit area of the Coal Hollow mine. Surface water resources within and adjacent to the permit area were identified during the initial issuance of the permit.

kstorrar

Operation Plan

Coal Recovery

Analysis:

The amendment meets the State of Utah R645 requirements for Coal Recovery.

The amendment satisfies the minimum requirements of R645-301-522 because narrative on pages 5-27 through 5-30 provides the most current coal recovery volumes in both the South Leases as well as the North Private Lease. The narrative indicates how much coal within the lease is recoverable, and breaks out the tonnages according to which recovery method will be employed, either by Surface, Underground or Highwall mining. Recent to this amendment is a table that further clarifies how much coal tonnage is included in the Federal coal reserves within the permit boundary. There are 5,664,100 tons of Federal coal reserves within the South Lease permit boundary; this amendment is presently seeking to recover 1,135,200 tons via surface mining methods. The remaining 4,329,800 tons of coal within the Federal coal reserves will be pursued at a later date. The narrative further clarifies that surface mining methods will recover 95%, underground mining methods will recover 45%, and highwall mining methods will recover 35% of the planned tons within the South Lease. A coal extraction overview is depicted on Drawing 5-9, which offers an illustration of all recoverable coal within South Lease permit boundaries.

jeatchel

Fish and Wildlife Protection and Enhancement Plan

Analysis:

The amendment meets the State of Utah R645-301-333 requirements for historic and archeological information. Deficiencies regarding the consultation process with the Bureau of Land Management were raised in a previous task (#5833) associated with this proposal. Following consultation with the Office of Surface Mining Reclamation and Enforcement (email correspondence from Feb. 25, 2019) it is determined that the permitting process may move forward. An updated threatened and endangered species list was obtained from the USFWS (IPaC 2/27/19) and it showed no new threatened or endangered species in the project area that hadn't already been consulted upon during previous permitting of the area.

The threatened or endangered species that have been identified as being potentially in the area, as of Feb. 2019, are the Utah prairie dog, the Mexican spotted owl, the Southwestern willow flycatcher, and the Jones cycladenia. The California condor also appears on the species list, however the population in Kane County, Utah is designated as an experimental, non-essential population with no critical habitat near the project area. There is no known habitat for Utah prairie dog and the species is not known to occur in or near the project area. The required habitat and known apparent distributional information indicate that it is not likely that the proposed mining activities will impact the Mexican spotted owl. The Southwestern willow flycatcher has the potential to have occurred in or near the project area but they are typically observed in thick willow riparian habitats that are not common in the project area. Though it was determined that it would be highly unlikely to impact this species from mining activities, surveys and habitat assessments were still made in consultation with USFWS in 2015. Due to the lack of high-quality habitat and the fact that no individuals were observed in the surveys, it was further reinforced that mining activities in the proposed project area would not affect the Southwestern willow flycatcher. It has also been determined that the project area does not contain the geology and soil types necessary to support a population of Jones cycladenia so no affects to this species are anticipated.

The primary wildlife concern with the Coal Hollow project has been the potential impact to the greater sage grouse, a wildlife species of concern in the state of Utah. Throughout the life of the mine, Alton Coal Development has performed compensatory mitigation including sage grouse habitat improvement in and around the mine site. As of the most recent sage grouse annual progress report, the company has completed 2,700 acres of habitat improvement to mitigate 554.5 acres of disturbance, a nearly 5:1 ratio. In addition to this compensatory mitigation, the company has also engaged in predator control, employee training programs, and other efforts to avoid, minimize, and mitigate the impact to the greater sage grouse.

tmiller

Topsoil and Subsoil

Analysis:

The application meets the requirements of R645-301-232, topsoil and subsoil removal, because soil recovery depths are reported on Dwg 2-1 Soil Survey map and because soil salvage monitoring commitments are described on pages 5-2 and 5-3 of Appendix 2-1.

Dwg 2-2 Topsoil Handling map provides a lot of information relating to the progress of final reclamation; the locations of substitute topsoil and subsoil; the current and future locations and volumes of stockpiled topsoil and subsoil; topsoil and subsoil accounting tables for the South Lease; and the outline of the LBA Blk 1 salvage area. The entire LBA Blk 1 area (80 acres) will have subsoil salvaged. Half the area (42 acres) is new disturbance, and so, will also have topsoil salvaged. The new disturbance area is faintly differentiated within the outline of LBA 1 disturbance. It is shown as area that will be live-hauled topsoil, but does not require topsoil for final reclamation. (That status will change with disturbance, of course.)

The Topsoil Accounting Table on Dwg 2-2 states that there currently is 96,681 CY of topsoil stored in stockpiles. The table also states that 215,586 CY of topsoil is required for final reclamation of the remaining South Lease disturbed areas, including the LBA Blk 1. The difference between the stockpiled and required is 118,905 CY. Topsoil to be salvaged from the 42 acre New Disturbance and the 10 acres of R1 & RS soils in the LBA Blk 1 will contribute 59,111 CY (personal communication with K. Nicholes 2.21.2019). That is an average topsoil salvage of 8.4 inches. Thus after LBA Blk 1 topsoil salvage, the topsoil deficit will be reduced to 49,495 CY. The Dwg 2-1 Topsoil Accounting Table provides some other sources of topsoil: the topsoil cultivation area and the undisturbed borrow area could together contribute 71,480 CY of topsoil substitute.

The subsoil Accounting Table on Dwg 2-2 states that there currently is 120,760 CY of subsoil stored in stockpiles. The table also states that 878,550 CY of subsoil is required for final reclamation of the remaining South Lease disturbed areas, including the LBA Blk 1. The difference is 757,790 CY. Subsoil salvage from the 80 acre LBA Blk 1 is estimated to yield 573,635 CY. An average subsoil salvage depth of 4.4 feet (53 inches) is required to achieve this estimated subsoil volume. With the addition of LBA Blk 1 subsoil, the deficit of subsoil is reduced to 184,155 CY for the South Lease. Dwg 2-1 Subsoil Accounting Table provides some other sources of subsoil: the 23 acre former spoils pile and the 21 acre undisturbed borrow area together will contribute 290,000 CY. The quality of the borrow area and spoil area subsoil is detailed in Appendix 2-4. The potential for the borrow area subsoil for use in final reclamation is not assured. Its limitations are detailed in the tables of Appendix 2-4. The Permittee has committed to further investigate this potential source of substitute subsoil (Appendix 2-4, p.7).

Dwg 2-1 Soil Survey map shows that soil map units 1, 6, 9, 10 and 11 will be salvaged during the LBA Blk 1 mining. Table 4-2 in Appendix 2-1 provides the original weighted average soil salvage from each map unit. These weighted average salvage depths are referred to in the soil handling plan shown on Dwg 2-1 and in MRP Section 232.100. These original weighted average soil depths were calculated to ensure that the final reclamation of the entire 325.9 acre mined area would have an overall average of fair quality (Appendix 2-1, p. 4-1). The Division is concerned that the soil salvage depths cannot be relied upon to result in an overall fair to good quality of salvaged soil for this LBA Block 1 amendment, because the weighted average equation has changed. i.e. The total salvage area is 80 acres rather than 325.9 acres stated in Table 4-5. Thus, the proportion of map unit 1 in overall salvage has changed from 7% (or 23.6 acres out of 325.9 from Tables 4-3.1 and 4-5) to 30% of the 80 acre LBA Blk 1 (Division's estimate). Thus, Map unit 1 now represents a greater proportion of the soils to be salvaged. The same is true for all the map units to be salvaged. All these map units have characteristics that limit the extent of salvage of good to fair soil.

Appendix 2-1, Table 5-1 provides the average depths to limiting soil features (or poor quality soil) for each map unit, as follows: map unit 1 = 33 inches; map unit 6 = 18 inches; map unit 9 = 36 inches; map unit 10 = 19 inches; map unit 11 = 24 inches. The table is preceded by the statement that "the combined depth of topsoil and subsoil varies…depending on physiographic setting and soil texture." The Division previously encouraged further field reconnaissance of the map units in the LBA Block 1 to provide more certainty of the average salvage depth, but the Permittee has strenuously objected to collecting further survey data from LBA Block 1 (cover letters dated 12/18/2018 and 1/30/2019). That being the case, the Division must rely upon the Permittee's monitoring commitments for soil salvage and handling to ensure the quality of the replaced soil. The South Lease soil handling commitments are stated in Appendix 2-1 and Chapter 2, and they are re-stated below.

- Appendix 2-1, p. 4-1. Salvage depths may include some poor quality materials when the weighted average of mixed soil is still within the fair range (referring to the Division's 2008 Guidelines for Topsoil & Overburden specifications).
- Appendix 2-1, p. 4-2. Actual topoil and subsoil salvage depths will be closely monitored by Alton Coal Development staff in consultation with a certified professional soil scientist to ensure that unsuitable materials are not incorporated into the topsoil and subsoil stockpiles or placed directly into the reclamation soil profile

(again referring to the Division's Guidelines).

- Appendix 2-1, p. 5-2. The salvage plan will achieve a 90% weighted average of good or fair quality soil on the final graded surface (referring to the Division's 2008 Guidelines for Topsoil & Overburden).
- Appendix 2-1, p. 5-2. Materials similar to that characterized by core hole 7 [tropic shale overburden] should not be used as substitute subsoil with in the 48 inch reclamation soil profile.
- Appendix 2-1, p. 5-3. ACD will conduct a monitoring program in the field during mining operations to ensure that only materials with good or fair suitability are placed in the upper four feet of the reclamation soil profile (referring to the specifications in the Division's Guidelines).
- MRP Section 232.500. Areas in the North or South Lease that exhibit surface accumulation of salts after being placed will be tested for elevated SAR ratio, this information will be reported with the topsoil sampling.
- MRP Section 232.300, Surface 8 inches of the reclaimed surface will be sampled and tested for fertility of the available phosphorus, soluble potassium, and nitrate-nitrogen content. One sample will be collected from every 2 – 5 acres based on soil type and variability.

MRP Section 232.100 states that the average depths of recovery will be used as a guide and monitored in the field using soil pedestals.

The Dwg 2-2 topsoil and subsoil accounting tables estimates that the soils handling plan will add 20,691 CY of topsoil and 131,948 CY of subsoil to Topsoil Pile #2 and Subsoil Stockpile #1, respectively.

pburton

Hydrologic Ground Water Monitoring

Analysis:

The amendment meets the State of Utah R645 requirements for Groundwater Monitoring.

The amendment proposes to develop open pits extending north of Pit 10. All groundwater resources have been accounted for within the current permitted area of the south lease. Open pit mining rests to the west of the Tropic shale ridge as shown on Drawings 5-15 and 5-15B. There will be no groundwater resources encountered within the proposed open pits and highwall mining areas. The current groundwater monitoring plan adequately monitors quantity and quality of groundwater resources within and adjacent to the permit area.

kstorrar

Hydro Surface Water Monitoring

Analysis:

The amendment meets the State of Utah R645 requirements for Surface Water Monitoring.

The current water monitoring plan includes surface monitoring sites above, within and below the mining activity. There are currently four water monitoring sits along Lower Robinson creek spaced above, within, and below the permit area. The extent of the disturbance stops before the ephemeral wash of Lower Robinson creek. There are no other surface water resources within the bounds of the proposed disturbed boundary so no addition surface water monitoring sites are necessary.

kstorrar

Hydrologic Diversion General

Analysis:

The amendment meets the State of Utah R645 requirements for Diversions.

The amendment includes an update to Appendix 5-2 Hydrology and Runoff Control for the south lease of the Coal Hollow mine. A few of the diversions in the south lease will be modified to accommodate mining development extending north of Pit 10 into the federal coal. The calculations for curve numbers, diversions, and culverts have been updated. Ditch 4 will be extended to the north and east to capture all runoff north of mining operations and convey it to Sediment Pond 3. Ditch 1 will be extended to the north to capture and convey all undisturbed runoff east of the disturbed area past the site and down Sink Valley wash.

The amendment discusses two new culverts will be installed along Ditch 4 shown on Drawing 5-3A on page 3 of Appendix 5-2. These culverts will allow runoff in Ditch 4 to be conveyed past the haul road and down to Pond 3.

kstorrar

Hydrologic Discharge Structures

Analysis:

The amendment meets the State of Utah R645 requirements for Sediment Ponds.

The amendment proposes to remove Sediment Pond 2 and instead convey the runoff to Sediment Pond 3. Diversion Ditch 4 will be extend to the east running along the southern boundary of Lower Robinson Creek to capture this additional runoff. Table 3 in Appendix 5-2 provides a narrative and calculations showing Sediment Pond 3 is adequately sized to contain and treat runoff reporting to the pond from watershed 3. Sediment pond is sized to accommodate this additional runoff for the required 10 year 24 hour rain event.

kstorrar

Reclamation Plan

General Requirements

Analysis:

The applicant has met the requirements of R645-301-800 General.

The Coal Hollow Mine is presently designated as a Non-Federal Mine. A Non-Federal Mine permit for C/025/0005 was issued on June 21, 2017 with an expiration date of November 8, 2020. Alton Coal Development, LLC also has in place a Non-Federal Reclamation Agreement for the Coal Hollow Mine C/025/0005. Approval of this application will revise the Non-Federal status of the mine to a Federal mine (Federal Coal). This action will require a revised permit to include Federal mine designation. Alton Coal Development, LLC will also be required to complete a new Federal Reclamation Agreement. The Federal Reclamation Agreement will assign the State of Utah, Division of Oil, Gas and Mining (Division) as well as the U.S. Department of the Interior, Office of Surface Mining and Reclamation and Enforcement (OSM) as Obligee's of the reclamation bond.

ssteab

Topsoil and Subsoil

Analysis:

The application meets the requirements for R645-301-240, soil reclamation plan, because Drawing 2-2 Soils Handling Plan shows the stockpiling of topsoil and subsoil from approximately 10 acres around the northern edge of Pit 10 and the live haul of the remaining topsoil and subsoil to the final graded surface of Pit 10 and progressive mining pits northward.

Drawing 5-38 shows the proposed reclamation timing. Pits F7 and F8 will remain to provide underground mining access. Together pits F7 and F8 will occupy 28.3 acres. However the West side of these pits will be graded and reclaimed. The portion of pits F7 and F8 to remain for UG mining is represented on Dwg 5-38 as an area of approximately 16 acres.

pburton

Hydrological Information Reclamation Plan

Analysis:

The amendment meets the State of Utah R645 requirements for Reclamation Hydrology.

The natural surface drainage pattern will be re-established following the proposed mining activities. The proposed open pit surface disturbance will mine through a relatively flat area sloping very gently to the west. Drawing 5-37 shows the open pits will be backfilled and the natural topography will be re-established to be a gentle westward dipping surface following the completion of mining activities.

kstorrar

Bonding Determination of Amount

Analysis:

The amendment meets the State of Utah R645 requirements for Determination of Bonding Amount.

The amendment satisfies the minimum requirements of R645-301-830 because Permittee has included cost estimates and cost model data to account for the additional surface disturbance in the South Lease associated with this application. The latest mine plan now proposes to mine surface pits 10-B and F-01 through F-08 in the Federal coal lease just north of the current Pit 10. In the process, Pit 10 will be filled in with the overburden from the pits as mining progresses north. Once pits F-01 through F-06 have been mined out and backfilled, Pits F-07 and F-08 will remain open to accommodate development of underground mining. The additional surface disturbance associated with essentially shifting the Pit 10 void north to Pits F-07 and F-08 equals 42 acres and is addressed in the bond posting and release plans included in this submittal. The maximum reclamation liability is addressed for both the South Lease and the North Private Lease, and the 10% Phase 1 incremental bonding figures are also preserved for all pits. Previously the posted bond amount was $12,750,000 and was considered adequate for the full life of both permit areas. As a result of the increased surface disturbance associated with additional mining in the South Lease the posted bond has been increased to $13,000,000. The increased bond coverage will be needed because at the end of 2019 the cumulative bond liability increases to $12,961,883.

jeatchel

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 28, 2019

To: Internal File

From: Steve Christensen, Coal Program Manager SLC 3/28/19

Subject: 510 (c) Recommendation for Alton Coal Development, LLC, Coal Hollow Mine, C/025/0005, Task #5855

As of writing of this memo, there are no NOVs or COs which are not corrected or in the process of being corrected for the Coal Hollow Mine. There are no finalized civil penalties, which are outstanding and overdue in the name of Alton Coal Development, LLC. Alton Coal Development, LLC does not have a demonstrated pattern of willful violations, nor have they been subject to any bond forfeitures for any operation in the state of Utah.

Attached is a recommendation from the OSM Applicant Violator System for the Coal Hollow Mine that states there are no outstanding violations.

O:\025005.COL\PERMIT\2019 LBA\510c.doc

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UTAH DNR OIL, GAS & MINING

Application Evaluation

There were no violations retrieved by the system

Application Number:	C0250005 SEQ:5
Applicant Name:	247248 Alton Coal Development LLC
Date of Request:	2/28/2019 9:37:49 AM
Requestor:	suzanne.steab

CAUTION: The Applicant/Violator System (AVS) is an informational database. Permit eligibility determinations are made by the regulatory authority with jurisdiction over the permit application not by the AVS. Results which display outstanding violations may not include critical information about settlements or other conditions that affect permit eligibility. Consult the AVS Office at 800-643-9748 for verification of information prior to making decisions on these results.

Violation Type	Violation Number	Violation Entities	Permit Number	Permitted State	Violation Status	Violation Date

Evaluation OFT

Entities: 8

250908 Sleepy Hollow Mineral Investors LLC - ()
---064574 Thomas T Ungurean - (Manager)
---107810 Charles C Ungurean - (Manager)
---250907 SH Coal Investment LLC - (Subsidiary Company)
------064574 Thomas T Ungurean - (Corporate Officer)
------107810 Charles C Ungurean - (Corporate Officer)
------247248 Alton Coal Development LLC - (Subsidiary Company)
---------036531 Robert C Nead Jr - (Manager)
---------247290 James J Wayland - (Manager)
---------251418 Larry W. Johnson - (Manager)

Narrative